

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Office Action dated October 23, 2006 has been received and its contents carefully reviewed.

By this Response, claim 19 has been amended. No new matter has been added. Claims 19-21 are pending in the application. Reconsideration and withdrawal of the rejections in view of the above amendments and the following remarks are respectfully requested.

In the Office Action, claims 19 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,894,136, issued to Wook (hereafter “Wook”) in view of U.S. Patent No 6,043,511, issued to Kim (hereafter “Kim”) and U.S. Patent No. 5,844,255, issued to Suzuki et al. (hereafter “Suzuki”). Applicants respectfully traverse the rejection because neither Wook, Kim nor Suzuki, analyzed alone or in any combination, teaches or suggests the combined features recited in the claims of the present application. In particular, Wook, Kim and Suzuki fail to teach an array substrate for an active matrix type liquid crystal display (LCD) device “wherein said pixel electrode extends over a portion of said gate line so as to form a storage capacitor comprised of a capacitor electrode extending from the pixel electrode, said gate line, and said first insulating layer therebetween, ... wherein the short-preventing part has a stepped portion that overlaps a stepped end portion of the gate line”, as recited in amended independent claim 19 of the present application.

The Office Action concedes that Wook fails to teach all the features recited in the claims of the present application. In particular, the Office Action states that Wook does not disclose “the device wherein the pixel electrode extends over a portion of the gate line so as to form a storage capacitor comprised of the pixel electrode, the gate line, and the first insulating layer, wherein the storage capacitor includes a short-preventing part disposed between the pixel electrode and the gate line, wherein the storage capacitor includes a semiconductor layer and the passivation layer, wherein the short-preventing part has a stepped portion that overlaps a stepped end portion of the gate line” (see, Office Action, page 3). Wook further fails to disclose “the data line is substantially the same width as an end portion of the date line” (see, Office Action, page 4). To remedy these deficient teachings of Wook, the Office Action relies upon the teachings of Kim and Suzuki. Based upon the teachings of Kim and Suzuki, the Office Action

alleges that it would have been obvious to modify the device of Wook by the teachings of Kim and Suzuki to obtain a device having all the combined features recited in the claims of the present application. Applicants respectfully disagree.

As can be seen, for example, in FIG. 10 of Kim and FIG. 3 of Suzuki, both Kim and Suzuki fail to teach “a storage capacitor comprised of a capacitor electrode extending from the pixel electrode, said gate line, and said first insulating layer therebetween, ... wherein the short-preventing part has a stepped portion that overlaps a stepped end portion of the gate line”, as recited in independent claim 19 of the present application.

Because Kim and Suzuki fail to teach at least the above features of independent claim 19, no combination of Kim and Suzuki would remedy the deficient teachings of Wook. Accordingly, no combination of Wook, Kim and Suzuki would provide a device having the combined features recited in independent claim 19. As such, independent claim 19 and its dependent claim 20 are allowable over Wook, Kim and Suzuki. Reconsideration and withdrawal of the rejection are respectfully requested.

In the Office Action, claim 21 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Wook, Kim, Suzuki and further in view of U.S. Patent No. 5,926,235, issued to Han et al. (hereafter “Han”). Applicants respectfully traverse the rejection because neither Wook, Kim, Suzuki, nor Han, analyzed alone or in any combination, teaches or suggests the combined features recited in the claims of the present application. In particular, Wook, Kim, Suzuki and Han fail to teach an array substrate for an active matrix type liquid crystal display (LCD) device “wherein said pixel electrode extends over a portion of said gate line so as to form a storage capacitor comprised of a capacitor electrode extending from the pixel electrode, said gate line, and said first insulating layer therebetween, ... wherein the short-preventing part has a stepped portion that overlaps a stepped end portion of the gate line”, as recited in amended independent claim 19 of the present application, from which claim 21 depends.

The Office Action concedes that Wook, Kim and Suzuki fail to disclose “the short-preventing part further includes an ohmic contact layer, and a conducting material between the semiconductor layer and the passivation layer” (see, Office Action, page 4). To remedy this deficient teaching of Wook, Kim and Suzuki, the Office Action relies upon the teachings of Han. However, Applicants respectfully submit Han fails to remedy the deficient teachings of Wook,

Kim and Suzuki such that any combination of these references would provide a device having the combined features recited in independent claim 19 of the present application.

In particular, as illustrated, for example, in FIG. 5I of Han, Han fails to teach a storage capacitor comprised of a capacitor electrode extending from the pixel electrode, said gate line, and said first insulating layer therebetween, wherein said storage capacitor further includes a short-preventing part disposed between said pixel electrode and said gate line, wherein the short-preventing part has a stepped portion that overlaps a stepped end portion of the gate line", as recited in independent claim 19, from which claim 21 depends. Since, Han fails to teach at least these features of claim 19, Han does not remedy the deficient teachings of Han.

Because Wook, Kim, Suzuki and Han fail to teach at least the above feature of independent claim 19, claim 19 and its dependent claim 21 are allowable over any combination of Wook, Kim, Suzuki and Han. Reconsideration and withdrawal of the rejection are respectfully requested.

Applicants believe the foregoing amendments and remarks place the application in condition for allowance and early, favorable action is respectfully solicited. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

U.S. Application No.: 10/810,659
Amendment dated January 23, 2007
Reply to Office Action dated October 23, 2006

Attorney Docket No.: 8733.341.10-US

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

Dated: January 23, 2007

Respectfully submitted,

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